

*Grow your
own* **TREES**
from seeds —



a
**PLANTING
GUIDE**



WOODLOT SEED CO.

NORWAY • MICHIGAN



PLANTING GUIDE for TREES and SHRUB SEED GROWING



Select trees and shrubs that are best suited to your soil and climate. Ask your County Agent, Agricultural Advisor, Soil Conservationist or Forestry Department.

The basic information for this booklet came from the U. S. Lake State Forestry Experiment Station, St. Paul, Minnesota, and the Minnesota Forestry and Horticulture Department. This has been supplemented by years of research and experimentation. Here is highlighted the result of that work, and some of the suggestions that will be helpful to you in deciding the kind of trees or shrubs you want to plant.

The seed bed should be prepared as for onions, on soil which has been in crop the preceding year, working to a depth of about a foot. Remove all sticks, stones, etc. If the soil is heavy use peat or sand with it.

COLORADO BLUE SPRUCE

One of the most popular trees. Grown from seed some are a greenish color with a blue tinge. Some are bright blue.

Conifer seeds are often broadcast, though sometimes sown in rows four or five inches apart. Seed of deciduous trees and shrubs (the kinds which lose their leaves over winter) are usually sown in rows ten or twelve inches apart.

After sowing seed water thoroughly at once, and, with small seed, cover to a depth of a quarter of an inch or a little more, with soil that has been sterilized, or with soil dug from near the seed bed and about two feet below the surface. Cover large seeds to about three times their diameter. Some experts advise dusting the seed with Semesan or some other mercuric compound at time of sowing. Some use clean sand and others a mixture of sand or peat.

JAP YEW

A tree of rich color which it retains thru the year. Can be shaped and trimmed. This tree is rather small, and fits itself to different soil and growing conditions. Will grow in shade or sunlight.

Cover the seed beds with burlap, and keep the soil moist, not wet, until germination starts. Then remove the burlap. If sowing is late provide a mulch to protect the seedlings. Provide partial shade. This may be brush, or a frame with lath spaced about two inches apart. During hot muggy weather seedlings sometimes wilt and die. Shade should be removed at such times, and if water is standing over the roots of the seedlings, sand or dirt may be sprinkled over them to remove the excess moisture. If any seedlings do die remove and destroy them at once. Some sprinkle Semesan over the seedlings at such times. Remove shade in early fall to harden seedlings. Keep the mulch until spring. Then remove early.

CONCOLOR FIR

A well shaped and popular tree. One of the most beautiful trees. Some are green, others bluish in color. Suited to ornamental and windbreak planting. Grows rapidly.

PAPER BIRCH

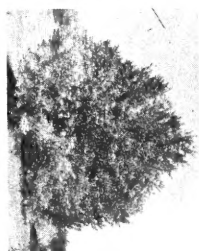
Is ornamental. Not too difficult to grow. Rapid grower.

WOODLOT SEED CO.

NORWAY, MICHIGAN

SINCE 1936

CHINESE ELM



SNOW FENCE

In many parts of the country live snow fences are being planted along paths and roads to prevent drifting of snow. And you can grow your own from seed. Use fast growing Chinese Elm, Norway Spruce, and some of the pines, firs and other spruce.

WINDBREAK

Government statistics tell us that a windbreak protecting buildings can reduce fuel bills from twenty-five to forty percent. In these days of rising fuel costs this is an item that might well be considered. Use the same kinds as for snow fence.

STRATIFICATION

You will notice that several of the seeds listed are followed by a star. Sown in the spring it is possible that a few only, or none of these seeds will germinate that season. Left for another year they do better. Because birds and rodents may destroy seeds left in the ground so long it may be well to mix these seeds with moist dirt, sand or peat, and place in a box in a cool dry place during the summer. You might ask your locker man to keep them at temperatures of 33 to 40 over summer. In the fall bury the box outside for the winter and sow seeds in the spring.

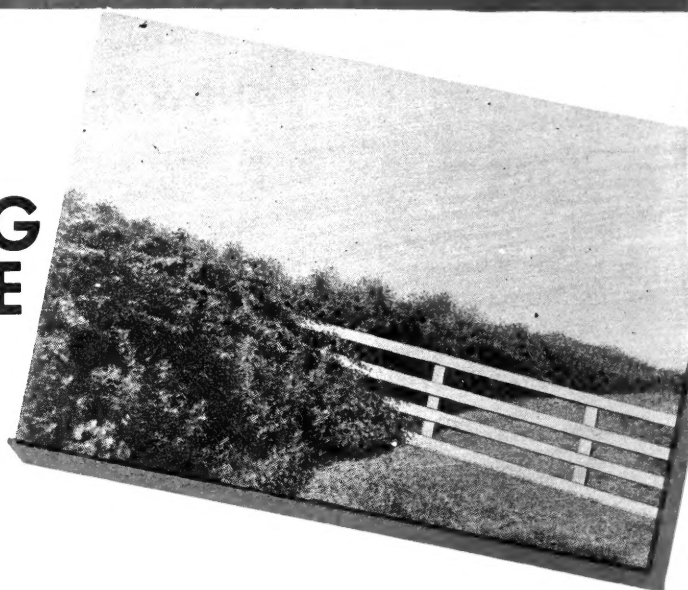
DOUGLAS FIR

Grows well over much of this country. Keeps its lower branches well. In color dark green, and is a rapid grower. An ornamental tree worthy of your attention.

AMERICAN ARBOR VITAE
Green is the color of this tree but there is some variation. Grows well in sunlight, or partial shade. Can easily be trimmed. Is often used as a hedge plant.

Multiflora Rose

THE LIVING FENCE



The living fence. This can be started from seed the first season if the seed is properly conditioned. Tests made last season were very satisfactory. This makes an attractive fence and when once established is a permanent living fence and will, if the thorny kind is used, keep out stock, cattle, horses and hogs. Ornamental with its white roses in summer, red berries in fall or winter.

Conditioning:

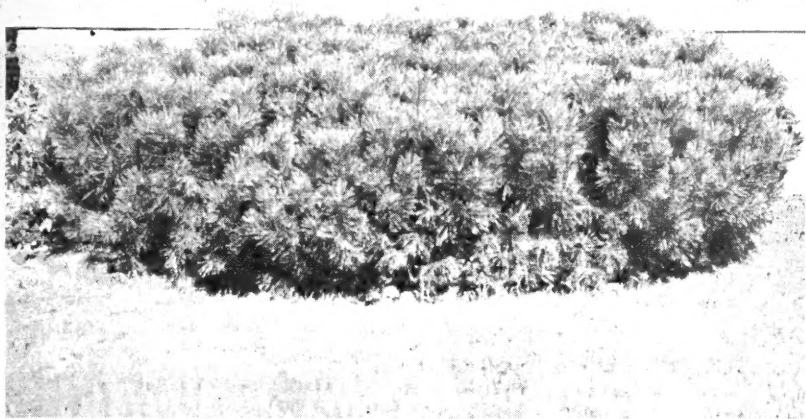
To condition Rosa Multiflora mix with dirt or sand and water, and place in your locker or refrigerator. Freeze for twenty-four hours, then thaw for a like time. Repeat twice and sow at once. Or stratify in fall. Firm soil after sowing this and other seeds. This should get very good germination.

Rosa multiflora seedlings should be mulched the first and second year, and when transplanted should be about 12 to 18 inches apart in a row. They should be protected against stock until they have a good start. This can be done with an electric fence or other methods. They will grow faster if cultivated.

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SWISS MOUNTAIN PINE

Mugho Pine

Usually a shrub and a dwarf at that. Is hardy. You won't regret this one.

Paper birch does well when provided with a cover of slightly

rotted hardwood sawdust, and kept partially shaded. The same method is good for hemlock. Using sawdust usually prevents the formation of a crust, and small seedlings have trouble breaking through a crust.

Hardwood seedlings are generally transferred when one year old to their permanent locations. The pines, spruce and firs are often transplanted once or twice to build up a strong root system.

Sprouting of almost any hardcoated seed is sometimes hastened by soaking the seed for several days in cold water. Honey and Black Locust may be covered with water just under the boiling point and left until the seed swells. Repeat for those which do not swell.

U. S. Department of Agriculture Farmer's Bulletin No. 1567 tells about the growing of trees and shrubs. It may be had from the Superintendent of Documents, Washington, D. C. for ten cents.

With your order will be sent additional
TIPS ON PLANTING.

WOODLOT SEED CO.

NORWAY • MICHIGAN

HERE'S HOW!

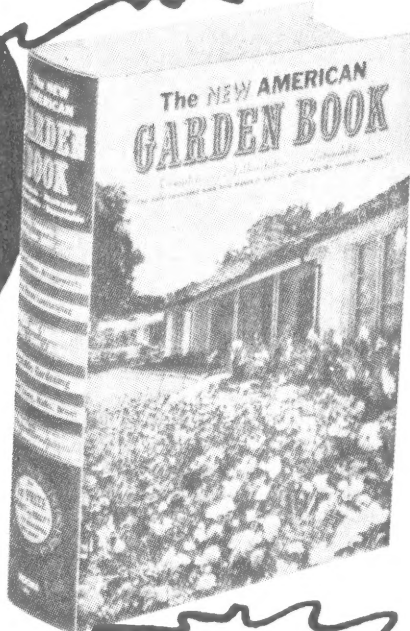
TO BE A SUCCESSFUL
GARDENER (LARGE OR SMALL)

and for only

\$1.50
POSTPAID

\$1.00 with order for tree
or shrub seeds.

THE NEW
American
GARDEN
BOOK



832
PAGES FULLY
ILLUSTRATED

Do those evergreens in front of the house look dried up? Are the flowers you planted in the garden blossoming full and healthy looking? The answer to these questions and thousands of others can be found in a minute in the NEW AMERICAN GARDEN BOOK . . . it has 832 pages, size 5 3/4" X 8 1/2" and tells about trees and shrubs, how to grow them from seeds and other methods. Tells how they should look when mature. This book is written just for you—a gardener. You may be the ordinary backyard variety of city gardener, or the large country gardener . . . you need this book. If you grow flowers or fruits this book tells you how . . . when they should be planted or the seeds sown—in spring or fall or started indoors, the kind of soil necessary for good healthy plants, etc. The NEW AMERICAN GARDEN BOOK contains complete information on outdoor and indoor flowers, landscaping, shade and fruit trees, flower arrangements, vegetables, herb gardens, seasonal planting—and how to treat plant diseases and insects . . . a complete encyclopedia that is fully illustrated. Easy to use as a reference . . . each section almost a complete book in itself.

This large, complete, fully illustrated book is yours for only \$1.50 postpaid—but for a real bargain, the greatest garden book value offered today, send only \$1 with your order for tree or shrub seeds.



WOODLOT SEED COMPANY
NORWAY, MICHIGAN



HIGHER YIELDS, BETTER STANDS

"I used Sunox as a preventive and can say that I haven't had one spot of damping-off."
"I found Sunox to be very effective when I used it on seedlings in the greenhouse."
"I have found your Sunox very effective in damping-off as well as fungus which

MIDVALE CHEMICAL CO.

J NURSERYMAN - MAY 1, 1956

CHEMOTHERAPEUTIC CUTTINGS AND SEEDLINGS PROTECTION AGAINST DAMPING-OFF

like to double or triple your yields . . . grow healthier plants and in the field . . . without spending a lot of time and money? Pictured on the left is a seedling which has been tested by college pathologists for the past 6 years. It is one of the many thousands of seedlings of nurserymen throughout the country used this amazingly effective Sunox . . . as well as in the field. In case after case results have been as follows:

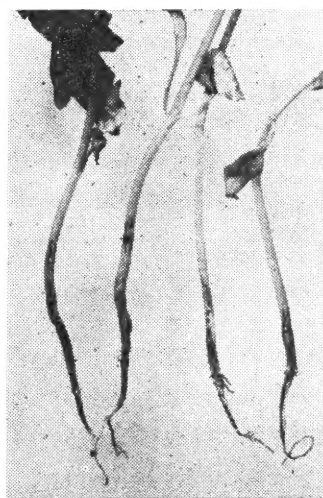
me plenty of trouble until it was as per directions. It is for me." In the mortality of action in the mortality of was noted immediately after Sunox. We made three trials 10 lbs. per acre on as with significantly good



by the plant and fights infection in the tissues.

DAMPING-OFF IS SEVERE!

ly too well, losses from root rot cut severely into In heavily infested soil, may produce a total loss new roots before the seedling causing a rotting of cut-level. There are several kinds of seedlings and cuttings of plants which are usually the major cause, it quickly spreads. If your yields have been 10 per cent the chances are Rhizoctonia is the fungus damage.



root rot in tomato seedlings, transplanted to inoculated soil. Colored lesions characteristic of Rhizoctonia infection.

INOCULATION WARNS MEN OF FUNGUS!

use and widespread extent of Rhizoctonia infections led the Connecticut

Nurserymen's Association to warn its members of the destructive fungus. In a bulletin released in April, 1954, it said: "In the two years there has been a decided increase in the occurrence of Rhizoctonia solani damping-off fungus, on nursery stock. Infections have been severe enough to cause the death of 'mature plants'." Said report: "Rhizoctonia has been active in the benches of any woody species, particularly taxus and ericaceous plants. But not limited to these by any means. It appeared in seedbeds of trees and shrubs, cutting them off at the ground. It shows in liners in the field and on mature hemlocks and rhododendrons."

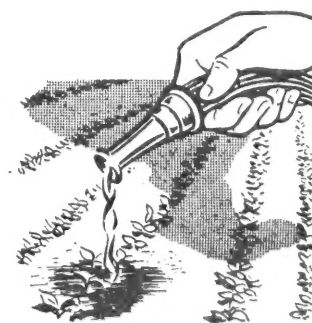
WHAT MAKES SUNOX SO SUCCESSFUL?

Basic sanitation is essential to good results, but soil sterilization gives disease protection only for a very short time, sometimes for hours. Sunox is not a soil sterilant. The secret of its success is chemotherapy. It means that the chemical is absorbed by the plants from the soil through their root system, enabling the plants to resist and fight the spread of the disease. This treatment gives seedlings, cuttings and even mature plants relatively long-lasting protection against root-rot diseases and damping-off. Sunox has a low degree of phytotoxicity. Even with repeated applications, it is harmless to most plants. Extensively tested by college pathologists and used on millions of plants, this valuable chemotherapeutic proved a practical and successful weapon in the control of Rhizoctonia-caused diseases as well as Fusarium Wilt of Carnations.

TREATMENT COST INCREDIBLY LOW

Yes, damping-off control with Sunox is expensive indeed. For as little as 20¢ you can treat 100 sq. ft. of propagating medium. Since greenhouse operations cost about \$1.50 per single square foot, you can protect your investment for about one-fifth of 1 per cent. This is because Sunox is effective at very low concentrations. 1 lb. makes 160 gals. of solution, enough to treat 2600 sq. ft. in the greenhouse or 1300 sq. ft. in the field. For tree seedlings such as white or spruce, twice the concentration (1 lb. per 160 gals.) is recommended.

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All you need is a watering can. Add Sunox to the water — it solves instantly and apply to the soil drench, for 8 sq. ft. in the greenhouse or 4 sq. ft. in the field. For applications spray tank, run through hose with pressure. Sunox may be used before or after planting. For directions, see each package.

DEALER INQUIRIES INVITED

MIDVALE CHEMICAL CO., P. O. Box 206, LODI, N. J.

Please send me, delivery charges prepaid:

8 oz. Sunox—\$5.45	5 lbs. Sunox—\$36.75	25 lbs. Sunox—\$137.50
1 lb. Sunox—9.75	10 lbs. Sunox—65.00	50 lbs. Sunox—262.50

☐ check enclosed ☐ charge*

*Purchases of 5 lbs. or more will be billed at our regular terms of 2/10/30 subject to credit approval.

Name **WOODLOT SEED CO.**

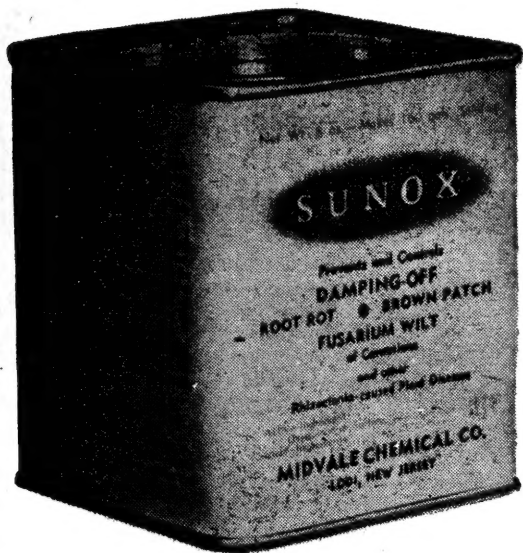
Address **NORWAY, MICH.**

City **NORWAY, MICH.** Zone State

Box 205, LODI, N. J.



AMAZING NEW CHEMOTHERAPEUTIC TREATMENT GIVES CUTTINGS AND SEEDLINGS AS MUCH AS 100% PROTECTION AGAINST DAMPING-OFF



**20c worth of SUNOX
treats 100 sq. ft. of
propagating soil!**

SUNOX TREATMENT NOW STANDARD PROCEDURE

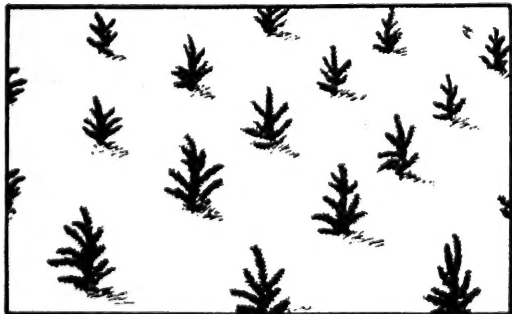
That's right—Sunox has proved so uniformly successful that nurserymen who have tried Sunox are now using it as a standard procedure in preventing damping-off and root rot. Here is what the Connecticut Nurserymen's Association passed along to its members—comments made by plant pathologists at the state agricultural experiment station:

"We have seen oxyquinoline sulfate* used successfully in cutting benches of taxus and for rooting cuttings of rhododendrons, azaleas and arbutus in pots. This solution watered on infected rhododendrons or azaleas in the homeowner's garden has brought these plants also through the trouble. . . We have seen it used on two-year-old taxus liners that were being carted out of a field by the truckload. After application of this material the trees stopped dying. One treatment usually does the job."

*The active ingredient in SUNOX.
And here are reports from nurserymen and growers in various parts of the country:
"In December we used Sunox on 15,000 taxus cuttings. To date we have had no loss from damping-off."

"Concerning our experience with Sunox on evergreen cuttings, we are pleased to inform you that from our limited tests so far we are pleased with the results. Noticeable improvement was noted in texture and general appearance of foliage of Azalea Hino-Crimson cuttings. Leaf drop on cuttings of Ilex crenata rotundifolia disappeared after one application. Five times the recommended strength applied to cuttings of Ilex opaca and five varieties of taxus had no detrimental effect."

"We applied Sunox in a test for control of pre-emergence damping-off on both black and white spruce. Damping-off killed 75 per cent of the seedlings in the control bed, 50 per cent in the recommended treatment and less than 10 per cent in double the recommended measure."



HIGHER YIELDS, BETTER STANDS

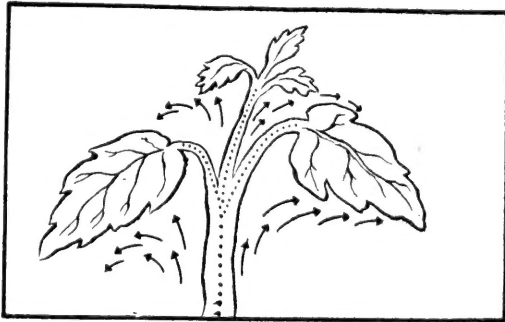
"I used Sunox as a preventive and can say that I haven't had one spot of damping-off."

"I found Sunox to be very effective when I used it on seedlings in the greenhouse."

"I have found your Sunox very effective in damping-off as well as fungus which

How would you like to double or triple your yields . . . grow healthier plants and obtain better stands in the field . . . without spending a lot of time and money? Pictured at the left is a new chemical which has been tested by college pathologists for the past 6 years. Since 1954, hundreds of nurserymen throughout the country used this amazingly effective treatment in the greenhouse as well as in the field. In case after case results have been astounding, often with a single application!

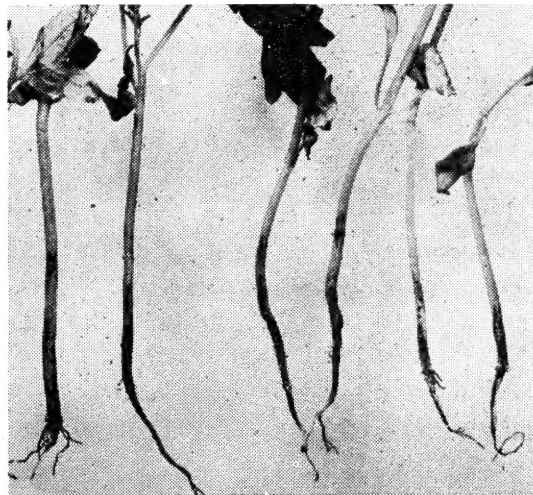
had been giving me plenty of trouble until I treated the soil as per directions. It is doing a fine job for me."
"A marked reduction in the mortality of the small trees was noted immediately after application of Sunox. We made three applications totaling 10 lbs. per acre on the affected areas with significantly good results."



Sunox is absorbed by the plant and fights infection from within the tissues.

DAMPING-OFF LOSSES SEVERE!

As you know only too well, losses from damping-off and root rot cut severely into growers' income. In heavily infested soil, damping-off fungi may produce a total loss by destroying the new roots before the seedlings emerge or by causing a rotting of cuttings at the soil level. There are several fungi which attack seedlings and cuttings but Rhizoctonia solani is usually the major culprit. Once present, it quickly spreads through the soil. If your yields have been averaging 30 to 40 per cent the chances are 9 out of 10 that Rhizoctonia is the fungus that caused the damage.



Rhizoctonia-caused root rot in tomato seedlings from infected soil, transplanted to inoculated soil. Note the dark-colored lesions characteristic of this fungus infection.

ASSOCIATION WARNS NURSERYMEN OF FUNGUS!

The rapid increase and widespread extent of Rhizoctonia infections led the Connecticut

Nurserymen's Association to warn its members of the destructive fungus. In a bulletin released in April, 1954, it said: "In the past two years there has been a decided increase in the occurrence of Rhizoctonia solani, a damping-off fungus, on nursery stock. The infections have been severe enough to cause the death of 'mature plants'." Said the report: "Rhizoctonia has been active in cutting benches of any woody species, particularly taxus and ericaceous plants. But it is not limited to these by any means. It has appeared in seedbeds of trees and shrub species, cutting them off at the ground level. It shows in liners in the field and on mature hemlocks and rhododendrons."

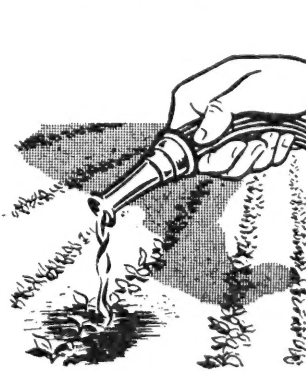
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